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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/526,442	03/16/2000	Kamran Ahmed	10442-5"US" JA/mb	2596

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EXAMINER

BRIER, JEFFERY A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/526,442

Applicant(s)

AHMED, KAMRAN

Examiner

Jeffery A. Brier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 03 December 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 12/03/02 has been entered. This amendment amended the specification and claim 1, proposed a change to figure 1, and added a new figure to the drawings, figure 4.

Drawings

2. The proposed drawing correction of figure 1, filed on 12/02/03 has been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference numeral 31 of figure 1 is not present in the specification, thus, graphics device driver 31 needs a reference in the specification, even though applicant at page 5 paragraph 3 of the 12/03/02 response stated no amendment to the specification was necessary. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4. The proposed new sheet of drawing for new figure 4, filed on 12/02/03 is not approved since it is of a poor quality, facsimiles of formal drawings are not currently accepted as formal drawings. MPEP 608.02 August 2001 edition page 600-90 second

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column next to last paragraph and 37 CFR 1.6(d)(4). A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference numeral 21 of newly proposed figure 4 is not present in the specification, thus, line 21 needs a reference in the specification, even though applicant at page 5 paragraph 4 of the 12/03/02 response stated the present specification is also amended to include the brief description of Figure 4 and the detailed description of Figure 4 from the '440 application, however such an amendment was not presented with the 12/03/02 amendment. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant amended

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claim 1 by altering the function of the first display controller from "combine (blend and/or overlay) the at least two first surfaces" to at least one of blend and overlay the at least two first surfaces. Similarly applicant amended claim 1 by altering the function of the second display controller from "combine (blend and/or overlay) the at least two second surfaces" to at least one of blend and overlay the at least two second surfaces. This amendment was to overcome a 35 USC 112 second paragraph rejection of the phrase "blend and/or overlay". The amended limitations "at least one of blend and overlay" clearly states that which applicant intends to be the invention, however, this invention is not supported by the originally filed specification including the specification incorporated by reference, since the specifications did not describe the display controller as performing both blending and overlaying one surface onto another surface to create the screen image.

The incorporated by reference patent application, 09/526,440, at page 8 lines 8-19 describes the CRTC's as either blending or overlaying one surface onto another surface to create a screen image (logo blended or overlaid within a video surface, page 8 lines 12-13) and the '440 application describes with reference to figure 4 and page 8 lines 21-28 using the drawing engine 60 to blend using the capability within the display controller to create a blended YUV surface which as shown in figure 4 is stored in memory 50 and then accessed by the CRTC's to form the subpicture blending (YUV over RGB overlay) 70. Thus, the '440 application did not describe the claimed invention of a display controller that reads from a graphics memory at least two surfaces into at least two pixel paths, convert at least one of the at least two surfaces, scale at least one

of the at least two surfaces, and at least one of blend and overlay the at least two surfaces.

The '442 application describes reading two surfaces from a graphics memory, converting at least one of the surfaces, scaling at least one of the surfaces, and blending or overlaying the at least two surfaces. The '442 application did not describe how the display controller can both blend and overlay two surfaces (and how to blend and overlay more than two surfaces).

Thus, the originally filed specification fails to convey that applicant had possession of the claimed invention.

Response to Arguments

8. Applicant's arguments filed 12/03/02 have been fully considered but they are not persuasive. Applicant argues that Ranganathan suggests only adding a second YUV path, page 6 second paragraph, (assumed to be added next to the RGB path 36) and does not disclose or suggest the addition of a second display controller. Similarly Ranganathan is suggesting to add a second RGB path next to the YUV path 34. In view of column 5 lines 17-45, column 7 lines 63-65, column 8 line 60, and figure 8A Ranganathan is suggesting a second YUV path be added to RGB path 36 and a second RGB path be added to YUV path 34 to allow a movie window on a graphics background to be equally available on both the LCD and the CRT which is suggest by the simultaneous mode, the dual mode, and the reverse-dual mode, which results in applicants claimed first and second display controllers.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ranganathan, U.S. Patent No. 5,764,201.

Ranganathan teaches a first display controller for combining graphics and movie for displaying graphics and movie on the LCD graphics display in the simultaneous mode, column 7 lines 42-50. Ranganathan's first display controller reads from a graphics memory (column 12 lines 15-19) at least two first surfaces (graphics and movie) into at least two pixel paths 36 and 34, converts the second surface (movie) from YUV to RGB, scales the movie surface in scaler 64, and overlays the at least two first surfaces in multiplexer 42, said first surfaces containing any one of RGB (graphics) and YUV (movie) format video. Ranganathan's first display controller is caused to select and read said first surfaces, convert said first surfaces into a like first format at least when said first surfaces are not all in said like first format (performed in color space converter 66), scaling at least one of said first surfaces (performed in scaler 64), overlaying said first surfaces to obtain a combined first surface (performed in multiplexer 42), and outputting said overlayed first surface to provide a first output stream of pixel data (output to path 30). In Ranganathan's first display controller flexibility is provided by

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selection of said first surface as well as scaling and blending of said first surfaces, whether said first surface is in RGB format, YUV format or mixed RGB/YUV format.

Ranganathan does teach a second display controller because in the dual mode, column 7 lines 51-67 the CRT displays the movie and the LCD displays the graphics. However, the circuitry shown by Ranganathan does not allow the CRT and the LCD to display different overlaid images. However, at column 7 lines 63-65 Ranganathan suggests that to do so would be desirable and that additional logic is needed.

Ranganathan fails to teach a second display controller having the same features of the first display controller. Specifically Ranganathan fails to teach providing a second display controller able to read from a graphics memory at least two second surfaces into at least two pixel paths, convert at least one of the at least two second surfaces, scale at least one of the at least two second surfaces, and at least one of blend and overlay the at least two second surfaces, said second surfaces containing any one of RG8 and YUV format video; causing said second display controller to select and read said second surfaces, convert said second surfaces into a like second format at least when said second surfaces are not in said like second format, scaling at least one of said second surfaces, at least one of blend and overlay said second surfaces to obtain a combined second surface, and outputting said combined second surface to provide a second output stream of pixel data, whereby flexibility is provided by selection of said second surface as well as scaling and blending of said second surface, whether said second surface is in RGB format, YUV format or mixed RGB/YUV format.

It would have been obvious to one of ordinary skill in the art at the time of applicants invention to modify Ranganathan to have additional logic, as suggested by Ranganathan at column 7 lines 63-65 and by the simultaneous mode, the dual mode, and the reverse-dual mode, so a first and second display controller exists allowing a first display to display overlayed, scaled, and converted first surfaces and allowing a second display to display overlayed, scaled, and converted second surfaces.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffery A. Brier whose telephone number is (703) 305-4723. The examiner can normally be reached on M-F from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi, can be reached at (703) 305-4713).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

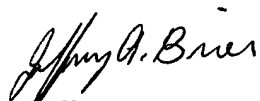
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.



Jeffery A Brier
Primary Examiner
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